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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
ANGEBRANNDT, MARTIN J	

ART UNIT	PAPER NUMBER
1756	

DATE MAILED: 09/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/763,857	LAWANDY ET AL.
	Examiner	Art Unit
	Martin J Angebranndt	1756

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 January 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-41* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-41* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *23 January 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1 Claims 1-41 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims should make it clear that the physical or chemical change occurs in the recording medium rather than a function interaction of software with a key or the like on the recording medium. Please use language from the specification and indicate the basis for the inserted language. The claims should also be amended to obviate any rejections based upon degradation due to extended use.

2 The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4 Claims 4,5,11 and 41 are rejected under 35 U.S.C. 102(b) as being fully anticipated by JP 04-128834.

The use of a photochromic compound which is sensitive to the reading/recording light is disclosed. This can block the light to the recording layers itself effectively hiding the information. The dye used is a spiropyran.

5 Claims 1,4,8,11, and 41 are rejected under 35 U.S.C. 102(e) as being fully anticipated by Vasic et al. '536.

Vasic et al. '536 teaches that all dye media are known in the art to fade due to repeated reading and a reflective layer is placed adjacent to the dye containing layer. (4/7-19). The copy count area changes in response to each authorized copy due to the use of a photosensitive material in that area. (4/27-32) The change is detectable as a difference in reflectivity. (5/17-32 and 6/30-45). The information from the copy count are controls a subroutine which controls the focussing. (example 1)

6 Claims 1,8 and 41 are rejected under 35 U.S.C. 102(b) as being fully anticipated by Matsuda et al. JP05-297627.

Matsuda et al. JP05-297627 teaches the use of a crystal violet lactone which fades when irradiated with light. The color fades when in contact with a base, but is colored when in contact with an acid.

7 Claims 8 and 41 are rejected under 35 U.S.C. 102(b) as being fully anticipated by Sato et al. '839.

See the examples, which use an accelerated read-out decay in lieu of actual reading of the media and exhibit a decrease in reflectivity. (col. 31-23).

8 Claims 1,8 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al. '839.

See the examples, which use an accelerated read-out decay in lieu of actual reading of the media and exhibit a decrease in reflectivity. (col. 31-23). The use of reflective layers over the recording layer is disclosed. (24/20-26).

It would have been obvious to test the decay of the **comparative media** of Sato et al. '839 with reflective layers added to validate the accelerated read-out degradation test.

The examiner notes that the comparative media are clearly intentionally produced without singlet oxygen quenchers and therefore suffer from the described defects due to singlet oxygen generation.

9 Claims 1,8 and 41 are rejected under 35 U.S.C. 102(b) as being fully anticipated by Fanselow '211.

See the exposure to produce and image in an aziridine film coated with PVA was bleached by sunlight exposure.

10 Claims 1,4,5,8,11 and 41 are rejected under 35 U.S.C. 102(b) as being fully anticipated by Gupta et al. '173.

The examples teach thermally deformable media which are erased on a track by track basis. (example 3).

11 Claims 8 and 41 are rejected under 35 U.S.C. 102(b) as being fully anticipated by Thomas et al. '769.

The examples teach a medium which is bleached so as to preclude reading by beams which are absorbed by the dye.

12 Claims 1,8 and 41 are rejected under 35 U.S.C. 102(e) as being fully anticipated by Wachi '207.

Wachi '207 teaches with respect to figure 4, the reading of the medium causing the melting and mixing of reflective layers. (4/57-5/30)

13 Claims 1 and 41 are rejected under 35 U.S.C. 102(b) as being fully anticipated by Miyagawa et al. '551.

see discussion of defocussed read beam erasing adjacent information (2/16-36).

14 Claims 1,4,8,11 and 41 are rejected under 35 U.S.C. 102(**a**) as being fully anticipated by Rollhaus et al. WO 98/11539. (the equivalent of Rollhaus et al. '772)

Rollhaus et al. WO 98/11539. (the teaches optical recording media with read inhibiting agents (abstract). The use of barrier layer is disclosed throughout. The oxidation of aluminum using the effects of the read beam and oxidation promotion agents, such as atmospheric oxygen, is disclosed including a semipermeable layer between the oxidizing species which are encapsulated and the reflective layer. (5/17-12/27 and figure 5). The use of hygroscopic salts combined with diffused water to facilitate this degradation of the reflective layer is disclosed. (35/21-26 and 10/10-12/27). The use of light absorbing materials which oxidize and become colored over time is disclosed. These may be leuco dyes and may utilize a barrier layer which acts as a semipermeable oxygen barrier is disclosed (13/3-14/27) The use of super absorbing polymers which absorb water or the like to cause volume, refractive index changes or delamination is disclosed alone or with a barrier layer. (15/3-16/23) Crazing of the substrate

through the use of a solvent is disclosed. (16/26-17/13 and 18/26-19/5) The use of an ablative read is also disclosed. (19/15-25). The disk fails either after being played a certain number of times or after being opened.

The examiner notes that with respect to figure 5, an oxidant containing layer is disclosed with a barrier layer between it and the reflective metal layer. The examiner also notes that section of read inhibiting agents describes them as increasing in absorbance with time, although it is due to the intrusion of oxygen and this when reading is attempted meets the optical intensity gradient limitation as more of the beam is absorbed as it passes through more of the photochromic layer. The examiner also notes that the superabsorbing polymer results in delamination and results in a change in refractive index due to the intrusion of water into the layer. Further the examiner notes that within the scope of the claims, the step of initiating the degradation may not be caused by the exposure, but merely may be coincident. (ie. it may be due to the intrusion of oxygen, water and the like during the recording process.)0

15 Claims 1,4,5,8,9,11,12 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rollhaus et al. WO 98/11539, in view of Savant et al. '221.

Savant et al.'221 teaches polymer dispersed azobenzene dyes to form a laser absorbing layer.

It would have been obvious to use other dyes, such as those disclosed by Savant et al. '221 as the dyes in the superabsorbing layer of Rollhaus et al. WO 98/11539 based upon their disclosed absorption by lasers.

16 A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and

useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

17 Claims 3 and 10 are rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1 and 6 of prior U.S. Patent No. 6,709,802. This is a double patenting rejection.

18 Claims 6,7,13-25,28-38 are rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-26 respectively of prior U.S. Patent No. 6,338,933. This is a double patenting rejection.

19 The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

20 Claims 3,5-7,10 and 12-14 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-11 of U.S. Patent No.

6,709,802. Although the conflicting claims are not identical, they are not patentably distinct from each other because although claim 5 and 6 do not recite a reflective layer, a reflective layer is recited in other claims and the optical response, which is interfered with is reflectivity.

21 Claims 6-7 and 13-41 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-11 of U.S. Patent No. 6,709,802. Although the conflicting claims are not identical, they are not patentably distinct from each other because although claim 41 does not recite an overlayer to prevent evaporation, the same process is used in prior claim 27, which is more narrow. Also the language of claims 15 and 26 clearly embrace the embodiments of KBr and CsF.

22 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Martin J Angebranndt whose telephone number is 571-272-1378. The examiner can normally be reached on Monday-Thursday and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff can be reached on 571-272-1385. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Martin J Angebranndt
Primary Examiner
Art Unit 1756

09/14/2004